

**DYNAMIC REALLOCATION OF PROCESSING RESOURCES FOR
REDUNDANT FUNCTIONALITY**

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ABSTRACT

10 A method of and multi-processor based apparatus for dynamically reallocating
processors to provide redundant functionality, the method including detecting a fault
in a first function having a first priority, the first function supported by a first
processor; selecting a second processor supporting a second function having a second
priority; and reallocating, responsive to the fault, the second processor to support the
first function when a predetermined relationship corresponding to said first priority
and said second priority exists, this relationship including, for example, one or more
of the first exceeding the second priority and the type and frequency of occurrence of
the fault.